```java
import java.util.Scanner;
import java.lang.Math;
class  Main{
    public static void main(String arg[]){
        Scanner Sr=new Scanner(System.in);
    System.out.println(".....Roots of quadtratic equation.....");
    System.out.println("Enter the values of a b c from the corresponding equation ax^2+bx+c");
    double x,s;
    double a=Sr.nextDouble();
    double b=Sr.nextDouble();
    double c=Sr.nextDouble();
    double D=(Math.pow(b,2))-4*a*c ;
    if(D<0){
       s=(Math.sqrt(-D))/(2*a);
       x=(-b)/(2*a);
       System.out.println("D is -ve,no real roots,roots are imaginary");
       System.out.println("imaginary roots are :"+x+"+i"+s+"and"+x+"-i"+s);
    }
    else if (D>0) {
       s=(Math.sqrt(D))/(2*a);
       x=(-b)/(2*a);
       System.out.println("real roots are:"+(x+s)+"and"+(x-s));
    }
    else  {
       x=(-b)/(2*a);
       System.out.println("Roots are equal:"+x+"and"+x);
    }
    }
}
```

```
×  Output

+ javac -Xlint -encoding UTF-8 -cp '.:./lib/*' Main.java
warning: [path] bad path element "./lib/*": no such file or directory
1 warning
+ java -Xmx256m -Dfile.encoding=UTF-8 -cp '.:./lib/*' Main
.....Roots of quadtratic equation.....
Enter the values of a b c from the corresponding equation ax^2+bx+c
1 2 1
Roots are equal:-1.0and-1.0
```

```
×   Output

+ javac -Xlint -encoding UTF-8 -cp '.:./lib/*' Main.java
warning: [path] bad path element "./lib/*": no such file or directory
1 warning
+ java -Xmx256m -Dfile.encoding=UTF-8 -cp '.:./lib/*' Main
.....Roots of quadtratic equation.....
Enter the values of a b c from the corresponding equation ax^2+bx+c
1 1 1
D is -ve,no real roots,roots are imaginary
imaginary roots are :-0.5+i0.8660254037844386and-0.5-i0.8660254037844386
```

```
× Output

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warning: [path] bad path element "./lib/*": no such file or directory
1 warning
+ java -Xmx256m -Dfile.encoding=UTF-8 -cp '.:./lib/*' Main
.....Roots of quadtratic equation.....
Enter the values of a b c from the corresponding equation ax^2+bx+c
1 10 24
real roots are:-4.0and-6.0
```